

Listing of Claims

1-15. (Cancelled)

16. (Currently amended) A method for producing differentiated human cells from human embryonic stem cells, the method comprising:

culturing human embryonic stem cells under conditions such that at least some of the cells adhere to a substrate;

removing the adhering colonies of the embryonic stem cells from the substrate in clumps;

then incubating the clumps in a container under conditions in which the clumps are essentially inhibited from attaching to the container and under conditions in which the clumps of embryonic stem cells coalesce into embryoid bodies; and

culturing the embryoid bodies to produce human differentiated cells.

17. (Currently amended) The method of claim 16 wherein the human differentiated cells are selected from the group consisting of neural cells, cardiac cells and hematopoietic hematopoietic cells.

18. (Previously presented) The method of claim 16, wherein the removal step is conducted in the presence of an enzyme that promotes disassociation of the clumps as clumps from the substrate.

19. (Previously presented) The method of claim 18, wherein the enzyme is dispase.

20. (Previously presented) The method of claim 16, wherein the removal step is conducted in the presence of a chelating agent.

21. (Previously presented) The method of claim 16, wherein the removal step comprises mechanically scraping the clumps from the substrate.

22. (Previously presented) The method of claim 16, wherein the removal step is conducted in the presence of trypsin, calcium and magnesium.

23. (Previously presented) The method of claim 16, wherein the incubation step comprises agitating the container.

24. (Previously presented) The method of claim 16, wherein the incubation step is conducted in a container made of plastic.

25. (Previously presented) The method of claim 16, wherein the incubation step is conducted in the presence of a serum-free medium.